

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. [canceled]
2. [canceled]
3. [currently amended] ~~A positioner for retaining a femoral hip implant in~~ A femoral hip implant for a femoral canal, the femoral canal having a canal wall with anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant being surrounded at least in part by cement positioned between the femoral hip implant and the femoral canal, the femoral hip implant having a longitudinal axis that in use is approximately parallel to the femoral canal longitudinal axis, and a polished and tapered exterior surface that permits the implant to move relative to the cement and therefore to subside distally into the cement under load, the positioner comprising:
 - a stem having a proximal end, a distal end, and a longitudinal axis extending therebetween, the stem having a polished and tapered exterior surface that permits the implant to subside distally along the canal axis into a cured cement mantel under load;
 - a cured cement mantel surrounding a portion of the stem within the femoral canal;
 - a positioner, the positioner being removably engageable with the stem, the positioner including means for preventing the stem femoral hip implant from rising out of the cement mantel and the femoral canal beyond a predetermined position by

abutment of the stem against the positioner while permitting subsidence of the stem femoral hip implant distally into the cured cement mantel along the canal axis; and means for anchoring the means for preventing relative to the femoral canal.

4. [Canceled]

5. [Currently Amended]The femoral hip implant positioner of claim ~~4~~ 3 wherein the means for preventing comprises a first member engageable with a portion of the stem to prevent it from rising, the first member ~~extends~~ extending over a portion of the stem femoral hip implant relative to the direction of the hip implant axis.

6. [Currently Amended]The femoral hip implant positioner of claim ~~4~~ 3 wherein the means for preventing comprises a first member engageable with a portion of the stem to prevent it from rising, the first member being is anchored relative to the cement mantel such that the stem femoral hip implant is able to move distally relative to the first member but is prevented from moving proximally beyond a predetermined position by engagement with the first member.

7. [Currently Amended]The femoral hip implant positioner of claim 3 wherein the positioner further comprising comprises a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring including the second member, the first member being positionable positioned over a portion of the stem femoral hip implant, the second member being positionable anchored in the cement mantel between the stem and the canal wall to anchor the positioner relative to the femoral canal.

8. [Currently Amended]The femoral hip implant ~~positioner~~ of claim 7 further comprising means for spacing the stem femoral hip implant a predetermined distance from the lateral aspect of the femoral canal.

9. [Currently Amended]The femoral hip implant ~~positioner~~ of claim 8 wherein the means for spacing comprises a spacing member connected to the body a predetermined distance from the second member, the spacing member being engageable- engaged with the stem femoral hip implant and the second member being engageable engaged with the lateral aspect of the femoral canal to maintain a predetermined spacing between the stem femoral hip implant and the lateral aspect of the femoral canal.

10. [Currently Amended]The femoral hip implant ~~positioner~~ of claim 9 wherein the spacing member comprises a projection extending medially from the second member toward the stem femoral hip implant.

11. [Currently Amended]The ~~positioner of claim 9~~ A positioner for retaining a femoral hip implant in a femoral canal, the femoral canal having anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant being surrounded at least in part by cement positioned between the femoral hip implant and the femoral canal, the femoral hip implant having a longitudinal axis that in use is approximately parallel to the femoral canal longitudinal axis, and a polished and tapered exterior surface that permits the implant to move relative to the cement and therefore to subside distally into the cement under load, the positioner comprising:

means for preventing the femoral hip implant from rising out of the femoral canal beyond a predetermined position while permitting subsidence of the femoral hip implant distally into the cement ;

means for anchoring the means for preventing relative to the femoral canal;

a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring including the second member, the first member being positionable over a portion of the femoral hip implant, the second member being positionable in the cement to anchor the positioner relative to the femoral canal;

means for spacing the femoral hip implant a predetermined distance from the lateral aspect of the femoral canal, wherein the means for spacing comprises a spacing member connected to the body a predetermined distance from the second member, the spacing member engageable with the femoral hip implant and the second member engageable with the lateral aspect of the femoral canal to maintain a predetermined spacing between the femoral hip implant and the lateral aspect of the femoral canal, and

~~wherein the spacing member comprising~~ comprises a projection extending distally from the first member to engage a recess formed in the femoral hip implant.

12. [Currently Amended] A positioner for retaining a femoral hip implant in a femoral canal, the femoral canal having anterior, posterior, medial, and lateral aspects and a longitudinal axis along the femoral canal from a proximal position near the hip joint to a distal position nearer the knee joint, the femoral hip implant being surrounded at least in part by cement

positioned between the femoral hip implant and the femoral canal, the femoral hip implant having a longitudinal axis that in use is approximately parallel to the femoral canal longitudinal axis, and a polished and tapered exterior surface that permits the implant to move relative to the cement and therefore to subside distally into the cement under load, the positioner comprising:

means for preventing the femoral hip implant from rising out of the femoral canal beyond a predetermined position while permitting subsidence of the femoral hip implant distally into the cement ;

means for anchoring the means for preventing relative to the femoral canal;

a body including first and second members extending at an angle from one another, the means for preventing including the first member and the means for anchoring including the second member, the first member being positionable over a portion of the femoral hip implant, the second member being positionable in the cement to anchor the positioner relative to the femoral canal; and

~~The positioner of claim 7 further comprising~~ third and fourth members extending from the body, the second, third, and fourth members being positionable in the cement adjacent the lateral, anterior, and posterior aspects of the femoral canal respectively.

13. [Currently Amended] The positioner of claim ~~10~~ 12 wherein at least the third and fourth members are biased inwardly toward the femoral hip implant axis in use to releasably grip the femoral hip implant prior to insertion of the femoral hip implant into the cement.

14. [Currently Amended] The positioner of claim ~~10~~ 12 wherein each of the second, third, and fourth members further comprises a projection extending inwardly toward the femoral hip implant axis in use, the projections being engageable with the exterior surface of the femoral hip implant to maintain a predetermined spacing between the members and the femoral hip implant.

15. [Currently Amended] A positioner for retaining a femoral hip implant in a femoral canal having a longitudinal axis extending from an upper position near the hip joint to a lower position near the knee joint, and anterior, posterior, medial, and lateral aspects radially about the axis, the positioner comprising:

a first member extending over a portion of the implant such that it limits upward axial motion of the femoral hip implant and permits downward axial motion of the femoral hip implant; and

a second member extending at an angle from the first member, the second member securing the positioner adjacent the femoral canal.

16. [Canceled]

17. [Currently Amended] A positioner for retaining a femoral hip implant in a femoral canal having a longitudinal axis extending from an upper position near the hip joint to a lower position near the knee joint, and anterior, posterior, medial, and lateral aspects radially about the axis, the positioner comprising:

a first member extending over a portion of the implant such that it limits upward axial motion of the femoral hip implant and permits downward axial motion of the femoral hip implant; and

a second member extending from the first member, the second member securing the positioner adjacent the femoral canal; and

~~The positioner of claim 15 further including~~ a third member projecting from one of the first and second members to engage the femoral hip implant to maintain the femoral hip implant at a predetermined radial position within the femoral canal during insertion into the femoral canal but permitting downward axial motion of the femoral hip implant after insertion.

18. [Currently Amended] A femoral hip system for implantation in a hip joint formed by a femur and a pelvis, the femur having a femoral canal, the system comprising:

a femoral hip implant having a stem for insertion into the femoral canal;

bone cement within the femoral canal surrounding the stem; and

a positioner having an anchor member embedded in the bone cement securing the positioner in the femoral canal adjacent the hip implant, and a retention member engageable with a portion of the femoral hip implant such that it blocks upward motion of the implant out of the canal while permitting downward motion of the implant into the canal.

19. [Canceled]

20. [Canceled]

21. [Canceled]

22. [Previously Presented] A positioner for positioning a femoral hip implant in a femoral canal, the canal having a canal wall and a longitudinal axis extending from an upper position near the hip joint to a lower position near the knee joint, and anterior, posterior, medial, and

lateral aspects radially about the axis, the femoral hip implant having a shoulder defining the top of the femoral hip implant, the positioner comprising:

an "L"-shaped body having a first leg positionable over a portion of the femoral hip implant relative to the canal axis and a second leg simultaneously positionable adjacent the canal wall to maintain a predetermined spacing between the femoral hip implant and the canal wall while permitting downward motion of the implant into the canal.

23. [Original]The positioner of claim 22 wherein the first leg is positionable over the shoulder of the femoral hip implant.

24. [Currently Amended]A method for positioning a femoral hip implant in a femoral canal, the method comprising:

providing a femoral hip implant configured to fit within a femoral canal;

inserting cement into the femoral canal;

inserting the femoral hip implant into the cement in the femoral canal;

inserting an implant positioner adjacent to the femoral hip implant, the implant positioner

including an anchor ~~retention~~ member placed into the cement and a retention

member positioned over a portion of the implant such so that the ~~implant-~~

positioner ~~retention~~ anchor member becomes firmly attached to the cement upon

hardening of the cement and the retention member permits the femoral hip

implant to subside down into the cement but prevents the femoral hip implant

from rising up out of the cement beyond a predetermined position by ~~engagement~~

abutment of the implant against with the ~~implant positioner~~ retention member.

25. [New] The femoral hip system of claim 18 wherein the positioner comprises a unitary, "T"-shaped body with legs projecting downwardly from the ends of the "T", the T"-shaped body defining the retention member and the downwardly projecting legs defining the anchor member.

26.[New] The femoral hip system of claim 25 wherein the positioner further comprises a boss projecting downwardly from the "T"-shaped body, the boss being engageable with the stem to space the stem radially a predetermined distance from the legs.